

NewsRelease

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Langley Research Center
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Violin Maker Explains the Science Behind the Instrument

Making a good violin depends greatly on wood selection, arching contours, free plate tuning, bridge tuning, and understanding the action of the bowed string, according to violin maker, Dr. Carleen Maley Hutchins.

Dr. Hutchins will explain the two basic vibrating systems of the violin (wood and air) in relation to the "wolf tone," at a colloquium, at 2 p.m. Tuesday, March 2, at NASA Langley's H.J.E Reid Conference Center.

She will describe the differences between the tonal qualities of the violin, viola, and cello, the modal tuning of the completed violin including fingerboard and tailpiece, and the scientific basis for the musically successful development of the Violin Octet. Seven instruments of the Violin Octet will be demonstrated and their special tonal qualities discussed.

In addition to constructing over 100 instruments of the new Violin Octet family, she has constructed 75 violins, 165 violas, and 12 cellos. By studying the acoustical properties of each instrument during construction and assembly, her work has resulted in a test that violin makers worldwide are using to produce consistently fine sounding instruments. She has also received numerous awards and honorary degrees.

The general public is invited to the Sigma Series lecture at the Virginia Air and Space Center that evening, at 7:30 p.m.

A media briefing will be held at 1:15 p.m. in the Wythe Room of the Reid Conference Center, 14 Langley Boulevard in Hampton. Media who wish to attend the briefing should contact Kimberly W. Land at (757) 864-9885.

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